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ERIOPHYID STUDIES XX

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This installment continues the survey of these plant-feeding mites as they occur in California. The most important new species offered this time is a pest of Guayule. The damage caused by this guayule mite has so far been only noticed in hybridizing greenhouses. Efforts to find the species on field-grown plants have not been successful, but later investigations may disclose them in that location. In the greenhouse these mites curl guayule leaves, especially on hairless hybrids.

The last installment, Eriophyid Studies XIX, appeared in the Bulletin of the California Department of Agriculture, July 1, 1952. This is V. 41, pp. 65-74, part No. 2.

Aceria parthenii Keifer, new species

Plate 219

Female 170-200μ long, 45μ thick. Rostrum 15μ long, small, curving up at end. Shield 28μ long, 38μ wide, roughly triangular in shape; median line present on rear $\frac{3}{4}$; admedians close at front, gradually diverging to rear of shield; first submedian line strong, roughly parallel to admedian; the lateral granular area encroaches to the first submedian line, this area with 2 or 3 diagonal lines of granules; dorsal tubercles 20μ apart, on rear margin; dorsal setae projecting 18μ to the rear. Forelegs 27μ long, tibia 6μ long, with a tibial seta; tarsus 6μ long, claw 7μ long, curved downward, tapering, slightly knobbed; featherclaw 6-rayed. Hindleg 25μ long, tibia 4μ long, tarsus 6μ long, claw 8μ long. Coxae set with elongate granules; anterior coxae contiguous. Abdomen wormlike; about 70-80 rings; microtubercles somewhat elongate but not produced. Lateral abdominal seta 21μ long, on about ring 8; first ventral seta 50μ long, on about ring 23; second ventral 7μ long, on ring 44; third ventral 20μ long, on ring 6 from rear; accessory seta present. Female genitalia 19μ wide, 13μ long, coverflap with about 12 longitudinal furrows; genital seta 7.5μ long.

Male not seen.

Type locality: Salinas, California. **Collected:** July 10, 1952, by W. H. Lange, Division of Entomology, University of California. **Host:** *Parthenium argentatum* H. Gray (Compositae), Guayule. **Relation to host:** The mites live in the surface hairs on the twigs and leaves. Hybrid plants with less hair have rather severe longitudinal leaf curling. The mites and damage have appeared only in the hybridization greenhouse, field surveys have not disclosed the mites so far. **Type material:** One type slide and 6 paratype slides with the above data. This mite is a member of the 6-rayed featherclaw group, and has rounded microtubercles. Four California species are in this category: *neocynarae* K. differs in having a large third ventral seta; *allenrolfeae* K. differs from *parthenii* in having a smooth shield; *magnoliae* K. differs in having two distinct submedian lines on the shield; *neoessigi* K. differs from *parthenii* by having two submedian lines, the second curving centrad back of the short first submedian line.

Aceria neobeevori Keifer, new species
Plate 220

Female 175-250μ long, 40-55μ thick, wormlike, yellowish. Rostrum 21μ long, projecting forward and a little down. Shield 30μ long, 36μ wide; design obscure but the median and admedian lines apparent on rear of shield in most cases; no lateral granular area. Dorsal tubercles rather large, on rear margin, 25μ apart; dorsal setae 22μ long, projecting backward. Forelegs 30μ long, tibia 4.5μ long, with small seta; tarsus 8.5μ long, claw 8.5μ long, curving down but slightly; featherclaw 3-rayed. Hindlegs 27μ long, tibia 4μ long, tarsus 8.5μ long, claw 9.5μ long. Coxae smooth; anterior coxae broadly connate. Abdomen with about 65-70 rings, set with microtubercles; each microtubercle produced into a short fine spine. Lateral seta 12μ long, on about ring 8; first ventral seta 20μ long, on about ring 17; second ventral 15μ long, on about ring 34; third ventral 23μ long, on about ring 5 from rear; accessory seta present. Female genitalia 20μ wide, 12μ long, the coverflap essentially smooth; setae 8μ long, on elongate and pointed tubercles.

Male not seen.

Type locality: Los Angeles, California. **Collected**: May 22, 1952, by Guy A. Beevor. **Host**: *Juglans californica* Wats. (Juglandaceae), Southern California black walnut. **Relation to host**: The mites form hanging galls of the catkins, which then enlarge and remain alive on the tree for most of the season. **Type material**: Type slide and 6 paratype slides with the above data. This mite is named for its discoverer. The produced genital setiferous tubercles, a characteristic of part of the Juglandaceous mites with 3-rayed featherclaws, associate *neobeevori* with *Aceria erineus* (Nal.). This latter mite is imported, whereas the new species is native. The new species differs from *erineus* by having spinuliferous microtubercles. This is the fourth *Aceria* listed on California black walnut, and English walnut.

The slides bearing these mites are all prepared in the resorcinol-formaldehyde method as described in the last installment. The type slides, and one paratype slide each have been sent to the U. S. Bureau of Entomology, Washington, D. C. In most cases there also remains dry plant parts bearing mite specimens, from which the type series originated.

PLATE DESIGNATIONS

AP1—Internal female genitalia from below
DA—Dorsal view of anterior section of mite
EDS—Left side view of dorsal skin structure
ES—Detail of left side skin structure
F—Featherclaw from below
GF1—Female genitalia and coxae from below
L1—Front left leg
S—Left side of mite
SA—Side view of anterior section of mite

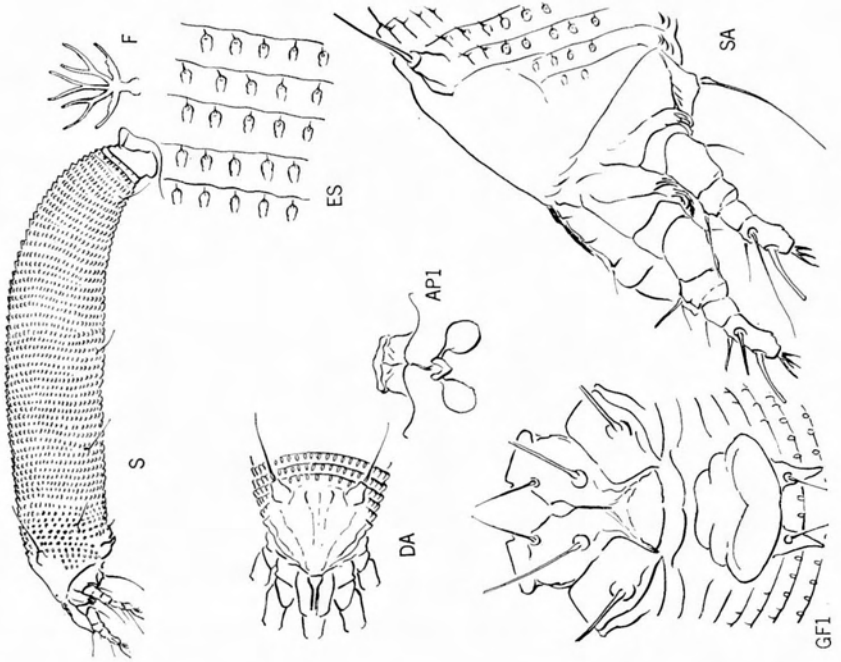

Plate 220—*Aceria neobeevori* new species

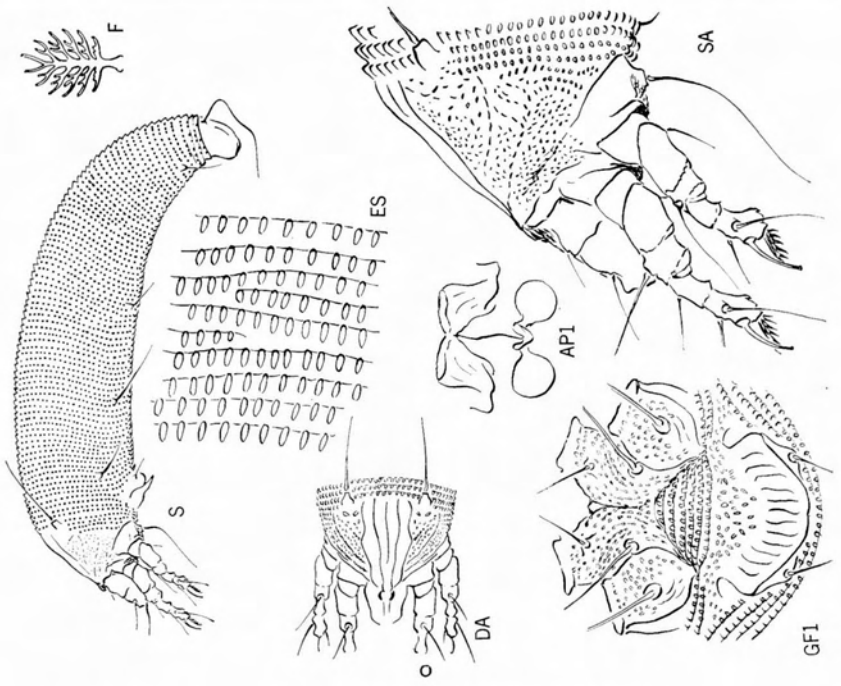

Plate 219—*Aceria parthenii* new species

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